Index of Claims

| Application No. | Applicant(s)     |
|-----------------|------------------|
| 10/770,106      | PETRALIA, ANGELO |
| Examiner        | Art Unit         |

Dolores R. Collins

**Appeal** 

3712

Rejected Allowed

(Through numeral) Cancelled Restricted

Non-Elected N Interference Α 0 Objected

| Claim  |           |     | Ш               |          |          |          |          | J            |          | L                                   | <u> </u> |          |      |           |          |          | _        | l        |          |          |          |          | _ |          | J        |
|--|-----------|-----|-----------------|----------|----------|----------|----------|--------------|----------|-------------------------------------|----------|----------|------|-----------|----------|----------|----------|----------|----------|----------|----------|----------|---|----------|----------|
| The color of the | Cla       | aim |                 |          |          |          | Date     | <u>e</u>     |          | _                                   |          | С        | laim |           |          |          |          | ate      |          |          |          |          | ] | CI       | aim      |
| 102  |           |     | 13/04           |          |          |          |          |              |          |                                     |          |          |      |           |          |          |          |          |          |          |          |          |   | Final    | Original |
| 102  |           | 1   | 3               | $\vdash$ | -        | -        | H        | $\vdash$     | $\vdash$ | $\vdash$                            | Н        |          | 51   | $\dagger$ |          | Н        | 寸        | $\dashv$ | _        |          |          |          |   |          | 101      |
| 103  |           | 2   |                 | $\neg$   | _        | $\vdash$ | $\vdash$ | 1-           | T        |                                     | П        |          | 52   | $\top$    | Г        | П        | 一        |          |          |          |          |          | 1 |          | 102      |
| 104   55   |           |     | 7               |          |          |          | $\vdash$ | Г            |          |                                     | П        |          | 53   |           |          |          |          |          |          |          |          |          | ] |          | 103      |
| Section   Sect |           |     | 7               |          |          |          |          |              |          |                                     |          |          | 54   |           |          |          |          |          |          |          |          |          |   |          | 104      |
| 107  |           | 5   | 7               |          |          |          |          |              |          |                                     |          |          | 55   |           |          |          |          | $\Box$   |          |          |          |          |   |          | 105      |
| 8     9     108     59     108     109     100     110     110     111     111     12     60     110     111     121     112     62     1112     112     112     112     113     113     113     113     113     113     114   |           | 6   | V               |          |          |          |          |              |          |                                     |          |          |      |           |          |          |          | _        |          |          |          | L        |   |          | 106      |
| 9  |           |     | 7               |          |          |          |          |              |          |                                     |          |          |      |           | L        | Ш        | _        | _        |          |          |          | _        |   | L        | 107      |
| 10   |           |     |                 | $\dashv$ | _        |          |          | <u> </u>     | _        |                                     | Ш        |          | 58   | ↓_        |          | Ш        | _        | _        |          |          | L        |          |   |          | 108      |
| 111     12     61     111     112     112     112     112     113     114     115     63     111     113     114     115     116     115     116     115     116     116     116     116     116     116     117     118     118     119     119     119     119     120     119     120     120     170     121     122     122     123     123     123     123     123     123     123     124     124     124     124     124     124     124     124     124     124     125     126     127     127     128     123     123     123     123     123     123     124     124     125     126     127     77     126     127     126     127     128     129     129     130     130     130     130     131     131     131     131     131     131     131     132     133     133     133  |           |     | Ш               | _        |          |          |          |              | <u> </u> | $oxed{oxed}$                        | Щ        | <u> </u> |      | ļ         | Ь.       | Ш        | _        | _        |          |          |          |          |   | <u> </u> | 109      |
| 12   |           |     | Ш               | _        | $\perp$  | _        | _        | _            |          | $ldsymbol{ldsymbol{ldsymbol{eta}}}$ | Ш        | <u> </u> |      | 1_        | <u> </u> |          | $\dashv$ |          |          |          | _        | <u> </u> |   | <u> </u> |          |
| 13   |           |     |                 | _        | _        | _        | _        | _            | <u> </u> | _                                   | Ш        |          |      | <b></b>   | ┡        | $\dashv$ | $\dashv$ |          |          |          | <u> </u> | <u> </u> |   |          | 111      |
| 14   |           |     | Н               | -        |          | _        | _        |              | _        | _                                   | Н        | <u> </u> | 62   | ┿         | Η.       | $\dashv$ | -        | -        |          |          | $\vdash$ | -        | 1 |          |          |
| 15   |           |     | Н               | -        | 괵        |          | ├        | ├-           | <u> </u> | _                                   | -        | -        |      | -         |          | $\dashv$ | -+       | -        |          | _        | -        | -        | ł | -        |          |
| 16     17     16     66     116     117     18     118     118     118     118     118     118     119     120     120     121     121     122     125     126   | -         |     | Н               |          | $\dashv$ | _        | $\vdash$ | -            | $\vdash$ | $\vdash$                            | Н        | -        | 65   | ┿         | -        | $\dashv$ | $\dashv$ | $\dashv$ | -        | -        |          | ┝        |   | _        | 115      |
| 17     18     68     117       18     68     119     120       20     70     120     121       21     71     122     122       23     73     123     123       24     74     124     125       26     76     126     127       28     78     128     129       30     80     130     131       31     81     131     131       32     82     132     132       33     82     133     133       34     84     134     134       35     85     135     136       37     88     133     133       38     86     136     137       38     86     136     137       38     99     140     141       40     90     140     141       41     91     141       42     92 <td>-</td> <td></td> <td>Н</td> <td><math>\dashv</math></td> <td><math>\dashv</math></td> <td>-</td> <td><math>\vdash</math></td> <td></td> <td>H</td> <td></td> <td>Н</td> <td><u> </u></td> <td></td> <td>+-</td> <td><math>\vdash</math></td> <td>-</td> <td>-</td> <td>+</td> <td></td> <td></td> <td>-</td> <td><math>\vdash</math></td> <td></td> <td>_</td> <td></td>  | -         |     | Н               | $\dashv$ | $\dashv$ | -        | $\vdash$ |              | H        |                                     | Н        | <u> </u> |      | +-        | $\vdash$ | -        | -        | +        |          |          | -        | $\vdash$ |   | _        |          |
| 18   19   68   118     19   70   120     20   71   121     21   71   121     22   73   123     24   74   124     25   75   125     26   76   126     27   77   127     28   79   129     30   80   130     31   81   131     32   80   130     33   83   133     34   84   134     35   85   135     36   86   136     37   88   138     39   90   140     41   91   140     41   92   142     43   94   144     44   94   94   144     45   96   146     47   98   148  | -         |     | Н               | $\dashv$ | $\dashv$ | _        | ⊢        |              | $\vdash$ | H                                   | Н        | -        | 67   | ╁╌        | $\vdash$ | $\dashv$ | -        | $\dashv$ | -        |          | $\vdash$ |          |   | _        | 117      |
| 19   69   119     20   70   120     21   71   121     22   73   123     24   74   124     25   75   125     26   76   126     27   77   127     28   78   128     29   79   129     30   80   130     31   81   131     32   82   133     33   83   133     34   84   134     35   86   135     36   86   136     37   88   138     38   88   138     39   88   138     39   90   140     41   91   141     42   92   142     43   93   143     34   94   144     45   96   1446     47   97   147     48 <t< td=""><td><u> </u></td><td></td><td>Н</td><td><math>\dashv</math></td><td><math>\dashv</math></td><td>_</td><td><math>\vdash</math></td><td>┢</td><td>-</td><td>-</td><td>Н</td><td><b>—</b></td><td></td><td>╁</td><td><u> </u></td><td>H</td><td>-</td><td>+</td><td>_</td><td></td><td></td><td><math>\vdash</math></td><td></td><td></td><td></td></t<>  | <u> </u>  |     | Н               | $\dashv$ | $\dashv$ | _        | $\vdash$ | ┢            | -        | -                                   | Н        | <b>—</b> |      | ╁         | <u> </u> | H        | -        | +        | _        |          |          | $\vdash$ |   |          |          |
| 20     120       21     71     121       22     72     122       23     74     124       25     75     125       26     76     126       27     77     127       28     78     128       29     79     129       30     80     130       31     81     131       32     83     132       83     33     133       34     84     134       35     86     136       37     88     135       36     86     136       37     88     138       39     89     139       40     90     140       41     91     141       42     92     142       43     94     144       45     96     145       46     96     146       47     97     147   |           |     | Н               | -        |          |          | $\vdash$ | -            |          | H                                   | Н        |          |      | ╁╌        | -        | $\vdash$ | $\dashv$ | $\dashv$ |          |          | _        | $\vdash$ |   |          |          |
| 22     3     122     123     124     124     124     124     124     124     124     124     125     126     126     126     126     127     127     128     129     130     130     130     130     130     130     133     136     136     136   | $\vdash$  |     | Н               | -        | -        | -        |          | <del> </del> |          | ┢                                   | Н        | <u> </u> | 70   | +         | $\vdash$ |          | $\dashv$ | $\dashv$ |          |          | -        |          |   |          | 120      |
| 22     3     122     123     124     124     124     124     124     124     124     124     125     126     126     126     126     127     127     128     129     130     130     130     130     130     130     133     136     136     136   |           |     | Н               | 寸        | $\neg$   |          |          |              |          | $\vdash$                            | Н        |          | 71   | $\vdash$  | -        | $\dashv$ | 7        | _        |          |          |          | _        |   |          | 121      |
| 23     73     123       24     75     124       25     76     125       26     77     127       28     77     127       28     79     128       29     79     129       30     80     130       31     81     131       32     83     133       33     83     133       33     83     133       34     84     134       35     85     135       36     86     136       37     88     138       39     88     139       40     90     140       41     91     141       42     92     142       43     94     144       45     96     146       47     97     147       48     99     149  | 1         |     | Н               | _        | ᅥ        |          |          | ┢            | Н        | $\vdash$                            | Н        |          |      | T         |          |          | 寸        | 寸        |          |          |          | Г        |   |          | 122      |
| 24     124       25     75       26     76       27     126       28     77       28     78       29     129       30     80       31     81       32     82       33     131       32     82       83     132       33     84       84     134       35     86       37     87       38     88       39     88       40     90       41     91       42     92       43     94       44     94       44     94       45     96       46     96       47     97       48     99       49     99  | 1         | 23  | П               | $\dashv$ | $\neg$   |          |          |              |          | Н                                   | П        |          | 73   |           |          | П        | 一        | 寸        |          |          |          |          | ı |          | 123      |
| 25     75     125       26     76     126       27     78     128       29     79     129       30     80     130       31     81     131       32     82     132       33     83     133       34     84     134       35     86     135       36     86     136       37     88     139       40     90     140       41     91     141       42     92     142       43     94     144       44     95     145       46     96     146       47     97     147       48     98     148       49     99     148       49     99     149  |           |     | Н               | 寸        |          |          |          |              | П        |                                     | П        |          | 74   | T         |          |          | T        | 寸        |          |          |          |          |   |          | 124      |
| 26     76     126       27     77     128       29     79     129       30     80     130       31     81     131       32     82     132       33     83     133       34     84     134       35     85     135       36     86     136       37     87     137       38     88     138       39     89     139       40     90     140       41     91     141       42     92     142       43     94     144       44     94     144       45     96     145       46     96     146       47     98     148       48     99     149  |           |     | П               | ヿ        | 一        |          |          | Γ            |          |                                     | П        |          |      |           |          | П        |          | 1        |          |          |          |          |   |          | 125      |
| 27     28     77     128     128     128     128     128     129     129     129     129     130     130     130     130     131     131     131     131     131     131     131     131     132     132     132     132     133     134   |           | 26  | П               | $\neg$   | $\neg$   |          |          |              |          |                                     | П        |          | 76   |           |          |          |          |          |          |          |          |          |   |          | 126      |
| 29   79   129     30   80   130     31   81   131     32   82   132     33   83   133     34   84   134     35   85   135     36   86   136     37   87   137     38   88   138     39   90   140     41   91   141     42   92   142     43   93   143     44   94   144     45   96   146     47   97   147     48   98   148     49   99   149  |           | 27  |                 |          |          |          |          |              |          |                                     |          |          |      |           |          |          |          |          |          |          |          |          |   |          | 127      |
| 30   80   130     31   81   131     32   82   132     33   83   133     34   84   134     35   85   135     36   86   136     37   87   137     38   88   138     39   88   139     40   90   140     41   91   141     42   92   142     43   93   143     44   94   94   144     45   96   146     47   97   147     48   98   148     49   99   149   |           | 28  |                 |          |          |          |          |              |          |                                     |          |          | 78   |           |          |          | $\Box$   |          |          |          |          |          |   |          | 128      |
| 31   81   131     32   82   133     33   83   133     34   84   134     35   85   135     36   86   136     37   87   137     38   88   138     39   88   139     40   90   140     41   91   141     42   92   142     43   93   143     44   94   144     45   96   146     47   97   147     48   98   148     49   99   149  |           | 29  |                 |          |          |          |          |              |          |                                     |          |          |      |           | Ш        |          |          | _        |          |          |          |          |   |          | 129      |
| 32   82   132     33   83   133     34   84   134     35   85   135     36   86   136     37   87   137     38   88   138     39   89   139     40   90   140     41   91   141     42   92   142     43   93   142     43   94   144     45   95   145     46   96   146     47   97   147     48   98   148     49   99   149  |           |     |                 |          |          |          |          |              |          |                                     |          | <u> </u> |      |           | Ш        |          | _        | _        |          |          |          |          |   |          | 130      |
| 33   83   133     34   84   134     35   85   135     36   86   136     37   87   137     38   88   138     39   89   139     40   90   140     41   91   141     42   92   142     43   93   143     44   94   144     45   95   145     46   96   146     47   97   147     48   98   148     49   99   149  | ш         | 31  | Ш               | _        | _        |          |          |              |          |                                     | Ш        | <u> </u> | 81   | Ш         | Ш        |          | _        | 4        | _        |          |          |          |   |          | 131      |
| 34   134     35   85     36   86     37   87     38   88     39   88     40   90     41   91     42   92     43   93     44   94     45   95     46   96     47   97     48   98     49   148     49   99  |           |     | Ш               | _        | _        |          |          |              |          | _                                   | Ш        |          |      | $\perp$   | Ш        |          |          | 4        | _        | _        | _        |          |   |          | 132      |
| 35   85   135     36   86   136     37   87   137     38   88   138     39   90   140     41   91   141     42   92   142     43   93   143     44   94   144     45   95   145     46   96   146     47   97   147     48   98   148     49   99   149  | $\square$ |     | $\Box$          | _        | _        |          |          |              |          |                                     |          |          | 83   | $\perp$   | Н        | _        | -        | 4        |          | _        | _        |          |   |          | 133      |
| 36   86     37   87     38   88     39   89     40   90     41   91     42   92     43   93     44   94     45   95     46   96     47   97     48   98     49   148   | $\vdash$  | 34  | $\sqcup$        | -        |          | _        | Ш        | <u> </u>     | Щ        | Ш                                   | Н        | <u> </u> | 84   | +         | Н        |          | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | _        |   |          | 134      |
| 37   87   137     38   88   138     39   89   139     40   90   140     41   91   141     42   92   142     43   93   143     44   94   144     45   95   145     46   96   146     47   97   147     48   98   148     49   99   149  |           |     | $\sqcup$        |          | 4        | -        | Щ        | $\vdash$     | $\vdash$ | $\vdash$                            | Н        | <u> </u> |      | $\vdash$  |          | $\dashv$ |          | $\dashv$ | 4        | $\dashv$ | -        | -        |   | $\vdash$ | 135      |
| 38   88     39   90     40   91     41   91     42   92     43   93     44   94     45   95     46   96     47   97     48   98     49   148     49   99   | $\vdash$  | 35  | $\vdash \vdash$ | $\dashv$ | 4        |          | $\vdash$ | $\vdash$     | $\vdash$ | Н                                   | Н        | -        | 97   | $\vdash$  | $\vdash$ | $\dashv$ | -+       | +        | $\dashv$ | $\dashv$ | -        | _        |   |          | 137      |
| 39   89   139     40   90   140     41   91   141     42   92   142     43   93   143     44   94   144     45   95   145     46   96   146     47   97   147     48   98   148     49   99   149  | $\vdash$  | 30  | $\dashv$        | $\dashv$ | -        |          |          |              | H        | Н                                   | $\dashv$ | _        |      | $\vdash$  | -        | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | _        |   |          | 138      |
| 40   90   140     41   91   141     42   92   142     43   93   143     44   94   144     45   95   145     46   96   146     47   97   147     48   98   148     49   99   149  | $\vdash$  | 30  | -               | $\dashv$ | +        |          | H        | Н            | Н        | $\vdash$                            | $\dashv$ | -        |      | $\vdash$  | $\vdash$ | $\dashv$ | $\dashv$ | $\dashv$ | -        | -        |          |          |   |          | 130      |
| 41 91   42 92   43 93   44 94   45 95   46 96   47 97   48 98   49 149   | -         |     | $\vdash$        | $\dashv$ | ┥        | $\dashv$ | $\vdash$ | -            | $\vdash$ | Н                                   |          | -        |      | $\vdash$  | Н        | $\dashv$ | $\dashv$ | -+       | $\dashv$ | ᅱ        | -        | -        |   |          |          |
| 42 92   43 93   44 94   45 95   46 96   47 97   48 98   49 149   99 149  | $\vdash$  |     | $\dashv$        | $\dashv$ | $\dashv$ | $\dashv$ |          | Н            | Н        | $\vdash$                            | $\dashv$ | -        |      | $\vdash$  | Н        | $\dashv$ | $\dashv$ | -        | $\dashv$ | -        | $\neg$   |          |   |          |          |
| 43 93   44 94   45 95   46 96   47 97   48 98   49 148   49 99   | $\vdash$  |     | $\dashv$        | $\dashv$ | 7        | $\neg$   |          | Н            | Н        | Н                                   | $\vdash$ | -        |      | $\vdash$  | Н        | $\dashv$ | $\dashv$ | $\dashv$ | ᅥ        | $\dashv$ | $\neg$   |          |   |          |          |
| 44 94 144   45 95 145   46 96 146   47 97 147   48 98 148   49 99 149  |           |     | $\vdash$        | $\dashv$ | $\dashv$ | $\neg$   | $\neg$   |              | Н        | Н                                   | $\neg$   |          |      | $\sqcap$  | $\vdash$ | 寸        | $\dashv$ | $\dashv$ | ᅥ        | $\dashv$ | $\dashv$ |          |   |          |          |
| 45 95   46 96   47 97   48 98   49 99  |           |     |                 | $\dashv$ | $\dashv$ |          | $\neg$   | $\neg$       |          |                                     | $\dashv$ |          |      | $\sqcap$  |          | $\neg$   | $\dashv$ | $\dashv$ | $\dashv$ |          | $\neg$   |          |   |          |          |
| 46 96   47 97   48 98   49 99  |           |     | $\dashv$        | $\neg$   | 1        | $\neg$   | $\neg$   |              |          |                                     | $\sqcap$ |          |      | П         | $\Box$   |          | _†       |          |          |          |          |          |   |          | 145      |
| 47   |           | 46  |                 |          |          |          |          |              |          |                                     |          |          | 96   |           |          |          |          | I        | ╛        |          |          |          |   |          | 146      |
| 49 99 149  |           |     |                 |          |          |          |          |              |          |                                     |          |          | 97   |           |          |          |          | $\Box$   | ┚        |          |          |          |   |          |          |
|  |           |     |                 |          |          |          |          |              |          |                                     |          |          |      |           |          |          |          | J        |          |          |          |          |   |          |          |
|  |           |     |                 |          | $\Box$   | $\Box$   |          |              |          |                                     |          |          |      |           |          | コ        | $\Box$   | I        | $\Box$   |          |          |          |   |          |          |
| <u> </u>   |           | 50  |                 | $\Box$   | $\Box$   |          |          |              |          |                                     |          |          | 100  |           |          | $\Box$   | $\perp$  | $\perp$  |          |          |          |          |   | ]        | 150      |

| Cli     | aim   | Γ             |          |   | ī | Dat      | e        |   |   |        |
|---------|---|---------------|----------|---|---|----------|----------|---|---|--------|
|         |   | Г             |          |   |   |          |          |   | Γ | П      |
| Final   | Original  | l             |          | l |   | l        |          |   |   |        |
| ᇤ       | rig   |               |          |   |   | l        |          |   |   | ΙI     |
|         |   |               |          |   |   |          |          |   |   |        |
|         | 101<br>102  | Г             |          |   |   |          | П        |   |   | П      |
|         | 102   |               | Г        | T |   |          |          | Г | Г | П      |
| <b></b> | 103   |               | Г        | Г | Г |          |          |   |   | П      |
|         | 104<br>105<br>106<br>107  |               | Г        | T | 1 |          | Г        |   | Г |        |
|         | 105   |               |          | Г | Г |          | Г        | Г | Г | П      |
|         | 106   |               |          | T | Г |          | Г        |   |   | П      |
|         | 107   |               |          |   |   |          |          |   |   | П      |
|         | 108   |               | $\vdash$ | Τ |   |          | Г        |   |   | П      |
|         | 109   |               |          |   |   |          |          |   | П | П      |
|         | 110   |               |          | Π |   | Г        | Г        | Г |   | П      |
|         | 111   |               |          |   |   | Г        | П        | П |   | П      |
|         | 112   |               |          |   |   |          |          |   |   |        |
|         | 112<br>113<br>114<br>115  |               |          |   |   | Γ        |          |   |   |        |
|         | 114   |               |          |   |   |          |          | L |   |        |
|         | 115   |               |          |   |   |          | Г        | Г | Г | П      |
|         | 116<br>117  |               |          |   |   |          |          | Π |   |        |
|         | 117   |               |          | Г |   |          |          |   | Г | $\Box$ |
|         | 118   |               |          |   |   |          | <b> </b> |   |   |        |
|         | 110   |               |          |   |   | <u> </u> |          |   |   | П      |
|         | 120<br>121<br>122   |               |          |   |   | Г        |          |   |   | П      |
|         | 121   |               |          |   |   |          |          |   |   | П      |
|         | 122   | $\overline{}$ |          |   |   |          |          |   |   | П      |
|         | 123   |               |          |   |   |          |          |   |   | П      |
|         | 123<br>124<br>125<br>126<br>127<br>128<br>129<br>130<br>131<br>132<br>133 |               |          |   |   |          | <u> </u> |   |   | П      |
|         | 125   |               |          |   |   |          |          |   |   | П      |
|         | 126   |               |          |   |   |          |          | Г |   | П      |
|         | 127   |               |          |   |   |          |          |   |   | П      |
|         | 128   |               |          |   |   |          |          |   |   | П      |
|         | 129   |               |          |   |   | Г        |          |   |   | П      |
|         | 130   |               |          | П |   | Г        |          |   |   | $\Box$ |
|         | 131   |               |          |   |   |          |          |   |   | $\Box$ |
|         | 132   |               |          |   |   |          |          |   |   | П      |
|         | 133   |               |          |   |   |          |          |   |   |        |
|         | 134   |               |          |   |   |          |          |   |   |        |
|         | 135   |               |          |   |   |          |          |   |   |        |
|         | 134<br>135<br>136   | _             |          |   |   |          |          |   |   | $\Box$ |
|         | 137<br>138  |               |          |   |   |          |          |   |   |        |
|         | 138   |               |          |   |   |          |          |   |   |        |
|         | 139   |               |          |   |   |          |          |   |   |        |
|         | 140   |               |          |   |   |          |          |   |   |        |
|         | 141   |               |          |   |   |          |          |   |   |        |
|         | 142   |               |          |   |   |          |          |   |   |        |
|         | 143   |               |          |   |   |          |          |   |   |        |
|         | 144   |               |          |   |   |          |          |   |   |        |
|         | 145   |               |          |   |   |          |          |   |   |        |
|         | 146   |               |          |   |   |          |          |   |   |        |
|         | 147   |               |          |   |   |          |          |   |   |        |
|         | 148   |               |          |   |   |          |          |   |   |        |
|         | 149   |               |          |   |   |          |          |   |   |        |
|         | 150   |               |          |   |   |          |          |   |   |        |
|         |   |               | _        |   | _ |          |          |   |   | _      |